



FINAL

Former Naval Station Treasure Island Restoration Advisory Board (RAB) Meeting Minutes

Meeting 185

18 October 2016

Community Restoration Advisory Board (RAB) Members in attendance:

Nathan Brennan, John Gee, Becky Hogue, Alice Pilram (Community RAB Co-Chair), Dale Smith

Department of the Navy and Regulatory Agency RAB Members in attendance:

Keith Forman, Navy RAB Co-Chair

Remedios [Medi] Sunga, California Department of Toxic Substances Control (DTSC)

Myriam Zech, San Francisco Bay Regional Water Quality Control Board (Water Board)

Other Navy and Regulatory Staff and Consultant Representatives in attendance:

Owen Chau, Chicago Bridge and Iron (CB&I)

Dave Clark, Navy

Kristi Diller, Parsons

Bill Franklin, Navy

Katie Henry, Tetra Tech, Inc. (Tetra Tech)

Laura Leone, Tetra Tech

Mukesh Mehta, Navy

Kimberly Noble, Navy

Carrie Ross, Parsons

Nathan Schumacher, DTSC

Tommie Jean Valmassy, Tetra Tech

Chris Yantos, Navy

Public Guests in attendance:

Bob Beck, Treasure Island

Development Authority (TIDA)

Carol Harvey, journalist

Max Garcia, John Stewart

Company

Shavone Watts

Melanie Williams, resident

Amelia Willoughy

Welcome Remarks, Agenda Review, and RAB Discussion Items

Keith Forman (Base Realignment and Closure [BRAC] Environmental Coordinator [BEC]) opened the October 2016 RAB meeting for the Former Naval Station Treasure Island (NAVSTA TI), held at One Avenue of the Palms (Building One), Room 117, on Treasure Island (TI). Mr. Forman noted a transcriptionist is present and discussed the process for commenting and asking questions.

Alice Pilram (Community RAB Co-Chair) reviewed the agenda (Attachment A). Ms. Pilram noted that Dale Smith (RAB member) would report on a recent visit to Site YF3 on Yerba Buena Island (YBI). Ms. Smith said that on September 16,

she and Myriam Zech (Water Board) visited Site YF3, which is a site undergoing investigation for historical petroleum releases. Ms. Smith and Ms. Zech shared the observations they made during their 45-minute site visit.

Ms. Smith said she saw what she believes is an intact portion of fuel line F03 running along the cliff. Ms. Smith said she and Ms. Zech were unable to time their visit with low tide, so visibility of the shoreline was not very good. Ms. Smith noted the shore area appears to have been an area where old items were discarded, and reported seeing building materials, machinery, old and broken Navy tableware, various tiles, and firebrick in the area. Ms. Smith said there were numerous sections of fuel line lying around and asked if they have ever been tested for petroleum contamination. Ms. Zech said she and Ms. Smith noticed what they determined to be two former piers at the site: one is a small, slender pier, and the other, on the western portion of the site, appears large with a massive concrete foundation. Ms. Smith speculated that the larger pier may have been used for provisioning, which is unusual because most provisions were probably loaded on TI, and not YBI.

Ms. Smith indicated that there was no indication of seepage or petroleum on the sediment surface, nor sheen in the water.

Ms. Smith said they saw several marine invertebrate species on shore, several types of seaweed, and six native plant species. Ms. Smith said there are numerous sand fleas in the area, which are a common food source for avocets. Ms. Smith is concerned that avocets would be exposed to contaminants of concern on YBI.

Ms. Zech said there are wooden supports for a pipeline structure; the supports remain, but the pipe is gone. The locations for the support structures are not in the same location as the pipelines or former pipelines that have been shown on maps. In addition, there seem to be some sections of 2-inch pipe still in place on YBI.

Mr. Forman and Ms. Pilram thanked Ms. Smith and Ms. Zech for taking the time to visit the site and for their report.

Old Business – RAB Minutes Approval

Mr. Forman asked for any edits to the minutes for meeting 184, August 2016. Ms. Smith requested minor edits. The RAB voted to approve the minutes with the edits incorporated.

Old Business – BRAC Cleanup Team Update

Nathan Schumacher (DTSC Community Involvement Specialist) provided an update on the work DTSC has done since the last RAB meeting. DTSC provided

comments on the Site 12 Record of Decision/Remedial Action Plan (ROD/RAP), the Site Management Plan (SMP), and the Finding of Suitability to Transfer (FOST). The agency also reviewed and signed the Site 21 Covenant to Restrict the Use of Property (CRUP) and the Site 27 CRUP. DTSC also reviewed responses to comments on the Final Status Survey Reports (FSSR) for Site 6 and the Building 233 catch basins, and the scoping survey report for waste water lines downstream of Building 233.

Ms. Zech said the Water Board reviewed many of the same documents as DTSC. In addition, the agency is preparing a letter on the draft Site YF3 Intertidal Area Data Gaps Investigation Plan, and that letter will be sent to the Navy on October 19, 2016. The Water Board is also currently reviewing the draft work plan addendum for monitoring well destruction and the draft Site 24 Soil Gaps Data Summary Report.

Mr. Forman noted that, during the past month, the regulators conducted on-site inspections of some of the field work, including monitoring well installation at Site 6.

New Business - Field Work Updates: Sites 6, 12, and 24

Mr. Forman introduced the presenters, Kimberly Noble (Navy), Mukesh Mehta (Navy), and Chris Yantos (Navy) to provide the field work updates (Attachment B). Ms. Noble began with an update on Site 6.

Site 6 was the Navy's firefighter training area. Various materials were burned, and different methods were used to extinguish the fires. Dioxins, a natural byproduct of burning anything, were the focus of the recent investigation at Site 6. Ms. Noble noted this investigation is not related to radiological contaminants; it is strictly for chemicals that fall under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Ms. Noble said the team installed an additional seven monitoring wells at Site 6, for a total of nine wells at the site. Ms. Smith commented she was relieved to hear that more monitoring wells were installed; initially there were only one or two wells. Ms. Noble said the wells will be sampled quarterly for the next year. From May through September 2016, the field team excavated soil in 17 different locations. The figure in the handout is color-coded to show the various depths of the excavations, ranging from 2 feet to 6 feet below ground surface. Based on data from those excavations, the Navy is excavating additional soil in three of the 17 locations. That work is expected to be completed the week of the current meeting. A report documenting all of the field work and laboratory results will be prepared in March 2017.

Ms. Noble showed photographs of the field work, including the stockpiled excavated soil. Dust control measures include covering the stockpile with plastic sheeting and spraying the soil with water. Mr. Forman noted that he visited Site 6 the date of this meeting, and the site is level, compacted, and nearly restored.

Mr. Yantos provided an update of the work at Site 12. On a map, he showed the locations of Solid Waste Disposal Areas (SWDA) Westside, Bayside, and North Point. Work at Westside is currently on hold, but the fences remain in place because the project is not complete. The Navy recently removed a slide-rail system that was used to hold the excavation in place because it went to a depth of nearly 15 feet.

Several of the survey units are closed and backfilled at SWDA North Point, while others remain open, with active remedial work taking place. Mr. Yantos reminded attendees that the SWDAs are broken into survey units to make cleanup more manageable. For the next 2 months, the focus of work at SWDA North Point will be survey unit 8. Part of the cleanup will include tearing up some of the asphalt on Northpoint Drive. When demolition is complete, the road will be repaired, restored, and reopened to traffic. The team found debris at survey unit 3 that is being removed. Chemical and radiological confirmation samples will be collected before that survey unit is restored. The soil removed from the site is taken to Site 32, where it is tested and scanned.

There are more survey units at SWDA Bayside because of its larger size. A road in this area will be torn up so the Navy can excavate soil about 8 feet below ground surface.

Mr. Yantos showed photographs of the work at the SWDAs. The Navy found crushed drums that had been disposed of at survey unit 2 at SWDA Bayside. The team has also found metal and car parts in the SWDAs.

Mr. Yantos said soil with elevated radiological detections is held in low-level radiological waste (LLRW) bins, which are sealed and sent off site to a licensed facility for disposal. There are also low-level radiological objects (LLRO). These LLROs are discrete items, usually metal deck markers or other radioluminescent objects. They differ from LLRW in that LLRW is soil with an elevated radiological concentration, but no discernable item. The count of LLROs for Phase III of the NTCRA (Mr. Yantos took over the project in 2014) is 466. The team has hauled off 13,400 tons of waste – about 600 truckloads. This chemical waste goes to a landfill in Buttonwillow, California. Any radiological waste not allowed to be disposed of in California is sent to one of several licensed radiological disposal facilities in either Idaho or Utah.

Mr. Yantos said the Navy's Radiological Affairs Support Office (RASO) has instituted use of a portal monitor on site. As a vehicle is driven through the detector, the monitor is able to detect low levels of radiation. Many landfills have such a monitor, so the Navy team decided to have one on site at TI as well. In addition, dust control and air monitoring continue where there is work.

Mr. Yantos presented a separate project that is also ongoing within Site 12. As indicated on slide 21 of the handout, there are numerous small excavations for chemical contaminants throughout Site 12. The areas for excavation were identified during the remedial investigation, and that information has been presented at previous RAB meetings. Several buildings must be demolished to complete some of the excavations so soil beneath them can be excavated.

Mr. Yantos showed the location of an area of petroleum in soil and arsenic in groundwater on Gateview Avenue, also within Site 12. The contamination poses a risk to ecological receptors in the bay, so the Navy will excavate the area with the petroleum-contaminated soil. Three buildings must be demolished for the excavation to be completed. The work in this area is expected to be completed by the end of January 2017.

Using the map on slide 23, Mr. Yantos showed the location of an open field next to the old firehouse (near excavation location RA16-EU). The Navy completed a shallow excavation in this field to remove a contaminant called benzo(a)pyrene that results from burning. During excavation to a depth of 18 inches, the team encountered metal that turned out to be two underground storage tanks. The Navy will return to that area at a future date to investigate those tanks. Mr. Yantos noted that they are small tanks, about 6 feet long.

Mr. Mehta took over the presentation, providing an update on field work at Site 24. Site 24 is about 20 acres and was the site of the Navy's dry cleaning facility. Planned reuse is primarily open space with some development in the southern portion of the site. A ROD/RAP was finalized in 2015, and the selected remedy was to excavate soil contaminated with dry cleaning solvents and treat the groundwater to break down contaminants. Excavation began the week of this meeting, including inside Building 99. Groundwater treatment will begin when soil removal is complete. Prior to excavation, the Navy collected soil and groundwater samples to better define the areas for excavation and treatment. The Navy is also destroying some wells at Site 24 because they are within the excavation area. The team is using California standards for well destruction.

Mr. Forman opened the floor to questions. Ms. Pilram asked whether Site 24 was the area of previous groundwater treatment. Mr. Forman said that is correct, there were three Treatability Studies performed at the site, which is why the original groundwater plumes have been greatly reduced in size.

Ms. Smith said the count for LLROs provided by Mr. Yantos does not include previous findings of LLROs. More than 1,000 LLROs have been collected to date. Mr. Yantos said that number is correct, and the quantity of LLROs that he notes is only for Phase III of the NTCRA housing area cleanup.

Ms. Smith asked if the radiological portal monitor has two sides. Mr. Yantos said it is difficult to see in the photograph, but there are two sides to the portal.

Ms. Smith said the update about petroleum in groundwater at Gateview Avenue should have mentioned that the petroleum mobilizes arsenic and that is a driver for the cleanup. Mr. Yantos agreed that the driver for the cleanup is the arsenic, and clarified that arsenic is a contaminant of concern for the bay. Mr. Forman noted that the Water Board asked the Navy to prioritize this site to protect the bay, and the Navy agreed.

Ms. Smith asked Mr. Mehta why his team collected groundwater samples before the contaminant source was removed. Mr. Mehta said the goal was to delineate the most contaminated areas of groundwater, and this method was laid out in the work plan and approved by the regulatory agencies.

Ms. Pilram asked for an explanation of groundwater on NAVSTA TI for those who are not familiar. Mr. Clark said groundwater is not used for a source of drinking water on NAVSTA TI. Drinking water is piped in from the City of San Francisco. Groundwater is water that typically comes from rain percolation through the ground. The groundwater flow on TI extends towards the bay. He noted the San Francisco Public Utilities Commission issues reports that consumers can read about their drinking water and where it is sourced. Ms. Zech said drinking water on NAVSTA TI is currently sourced from the Hetch Hetchy Reservoir.

Carol Harvey (journalist) said the small excavations throughout Site 12 were never thoroughly discussed at a RAB meeting. She also said a 4-page leaflet mailed in August (note: this was a Navy work notice) about another cleanup did not reach enough people. Ms. Harvey said she believes or has heard that the dust from Halyburton Court made people ill, as did dust from the demolition of the star barracks. Mr. Yantos clarified that the small Site 12 digs were presented at several RAB meetings, but it was another Navy project manager, Bryce Bartelma, who presented the information. That information has been presented extensively at other RAB meetings. In addition, the 4-page Navy work notice was hand-delivered to all the residences within a certain radius of the work, and that effort was closely coordinated with the housing providers. Ms. Pilram clarified that the star barracks demolition is a City of San Francisco Project, and not a Navy project.

Melanie Williams (resident) said she has been a resident of TI for 18 years. She said the Navy is doing a lot of work. She appreciates that TI is getting cleaned up, but it can be stressful to residents who feel like they do not know what is happening. Ms. Williams said her main concern is where she will eventually live, now that all this construction and redevelopment is taking place.

New Business - Document Tracking Sheet and Field Schedule

Mr. Clark presented the Document Tracking Sheet (DTS) (Attachment C) and the Field Schedule (Attachment D). Mr. Clark noted the first seven items on the DTS are related to radiological investigations; that number is two fewer than last time due to recent progress. Numerous documents are being issued for agency review soon. The majority of future documents will be related to Site 12. Field work will include the three sites presented tonight (6, 12, and 24) as well as Site YF3 on YBI.

New Business - Co-Chair Announcements and Future Agenda Items

Ms. Pilram said she will not be at the next RAB phone check-in. Becky Hogue (RAB member) and Nathan Brennan (RAB member) said that the next RAB meeting date conflicts with the Citizen's Advisory Board (CAB) meeting. The RAB voted to move the RAB meeting to the second week of December, on December 13, 2016. Mr. Forman said the RAB and BCT members traditionally hold a small holiday potluck the hour before the December RAB meeting. The group agreed to hold the RAB potluck again before the December meeting.

Mr. Forman said the Navy will host its third annual community bus tour on Saturday, November 5, 2016. There is a flyer at the handout table, and people can RSVP in person at the meeting to Tommie Jean Valmassy (Tetra Tech).

Community Question and Answer Period

Ms. Harvey said she has concerns about diversity on the RAB board, and she brought it up at the August RAB meeting as well. She feels the RAB is not diverse and is unable to do its job. Mr. Forman said he disagrees with Ms. Harvey's assessment, and he has asked an attorney familiar with Department of Defense (DoD) protocols about diversity. The attorney indicated that "diversity" in the DoD rule means a diversity of perspectives as it may relate to environmental cleanup.

Closing Remarks

Mr. Forman thanked everyone for attending. The next RAB meeting will be Tuesday, December 13, 2016, at Building One. The meeting was adjourned at 8:56 p.m.

18 October 2016 RAB Meeting Handouts

- Attachment A: NAVSTA TI RAB Meeting No. 185 Agenda
- Attachment B: Field Work Updates: Sites 6, 12, and 24
- Attachment C: Document Tracking Sheet
- Attachment D: Field Schedule

AGENDA
NAVAL STATION TREASURE ISLAND
ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING
Tuesday, 18 October 2016
Building One, Room 117, Treasure Island*
MEETING NO. 185

I. WELCOME REMARKS AND AGENDA REVIEW

7:00 – 7:05 Welcome, Introduction
Lead: Keith Forman, Navy Co-Chair

7:05 – 7:15 RAB Discussion Items and Agenda Review
Lead: Alice Pilram, Community Co-Chair

II. OLD BUSINESS

7:15 -7:20 RAB Meeting Minutes Approval Meeting 184
Lead: Keith Forman, Navy Co-Chair

7:20 – 7:25 BRAC Cleanup Team Update
Leads: DTSC and Water Board

III. NEW BUSINESS

7:25 – 8:25 Field Work Updates: Sites 6, 12, and 24
Leads: Kimberly Noble, Chris Yantos, and Mukesh Mehta
Presentation Q&A: RAB
Presentation Q&A: Community

**8:25 – 8:35 Document Tracking Sheet and Upcoming Field Work
Schedule**
Lead: Dave Clark

8:35 – 8:45 Co-Chair Announcements and Future Agenda Items
Leads: Alice Pilram and Keith Forman

IV. COMMENTS ON NON-AGENDA ITEMS

8:45 – 9:00 Community Question and Answer Period
Lead: Keith Forman, Navy Co-Chair

9:00 Adjourn

Next Regular Meeting: No November 2016 Meeting

7:00 pm Tuesday, 6 December, 2016

NEW Location: Building One, Treasure Island

Next Treasure Island Citizen's Advisory Board (CAB) Meeting: See the web site for latest dates and times for future meetings: www.sftreasureisland.org

Next Interim RAB Community Member Conference Call: 7:00 p.m. Tuesday, 29 November 2016

Navy BRAC Web Site: <http://www.bracpmo.navy.mil> (click on map for Treasure Island)

Navy San Diego Office Address:

Director
Navy BRAC PMO West
33000 Nixie Way
Building 50, Attention Keith Forman
San Diego, CA 92147

Keith Forman: (619) 524-6073
Local phone number: (415) 308-1458

*NOTE NEW MEETING LOCATION: The RAB will now meeting in Building One. As you enter the front gate of TI, Building One is the first building on the right. The meeting location is currently room 117, located downstairs on the right side of the building.



RAB Meeting

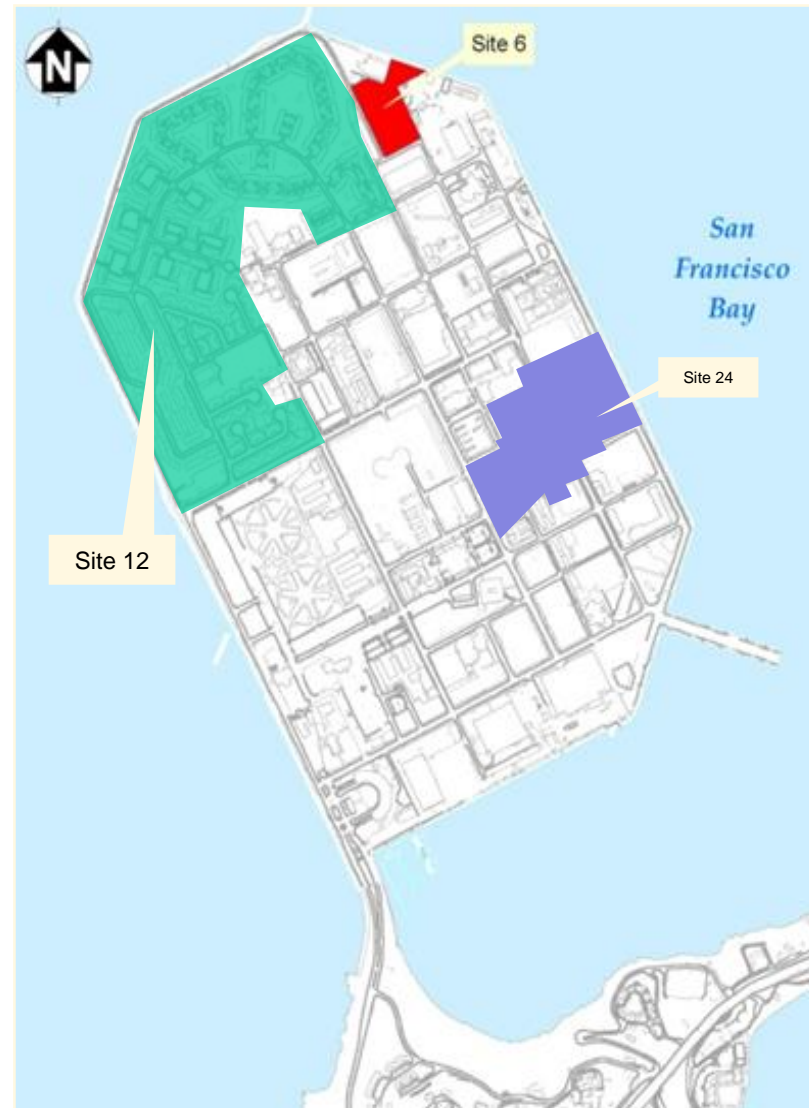
Site 6, 12 & 24 Fieldwork Update

Former Naval Station Treasure Island

October 18, 2016

**Kimberly Noble (Site 6), Chris Yantos (Site 12),
Mukesh Mehta (Site 24)**

Site 6, 12 & 24 Presentation



Site 6 Firefighter Training

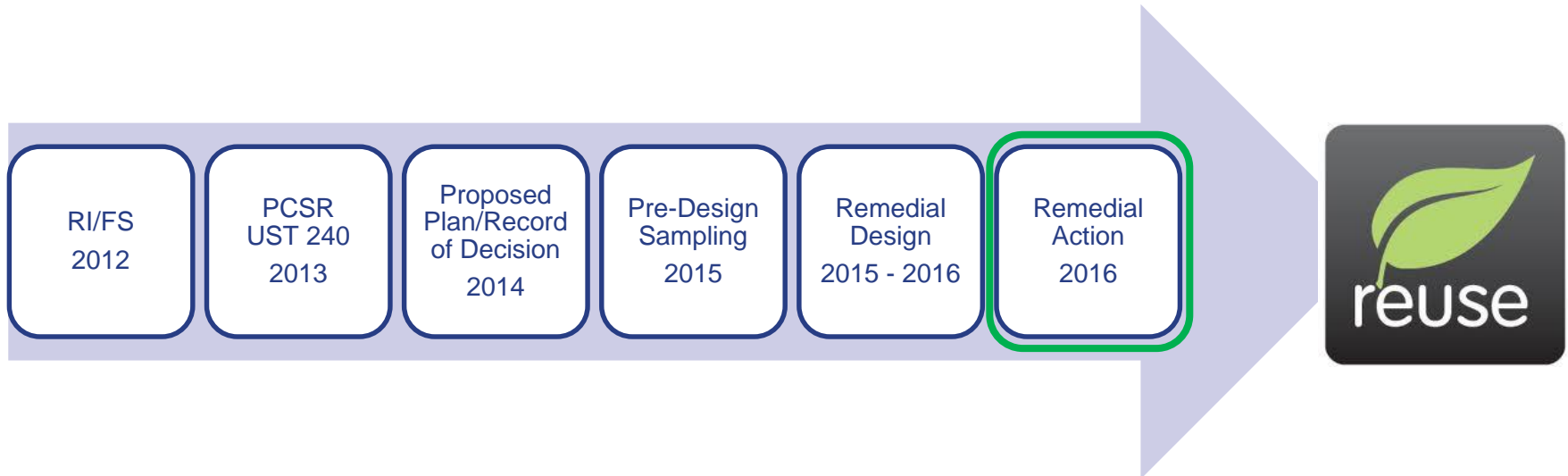


Firefighter Training – Extinguishing fuel oil fire, Treasure Island Damage Control School, 1945

Site 6 Environmental Cleanup Process (Non-Radiological)



Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Process



RI/FS – Remedial Investigation / Feasibility Study

PCSR – Post Construction Summary Report

UST – Underground Storage Tank

Site 6 Field Activities & Look Forward



MAY – SEPTEMBER 2016

- Completed excavations at 17 locations for Dioxins in soil from 2.5 to 6.5 feet below ground surface (bgs)
- Backfilled with clean soil and compacted to ground surface

OCTOBER 2016

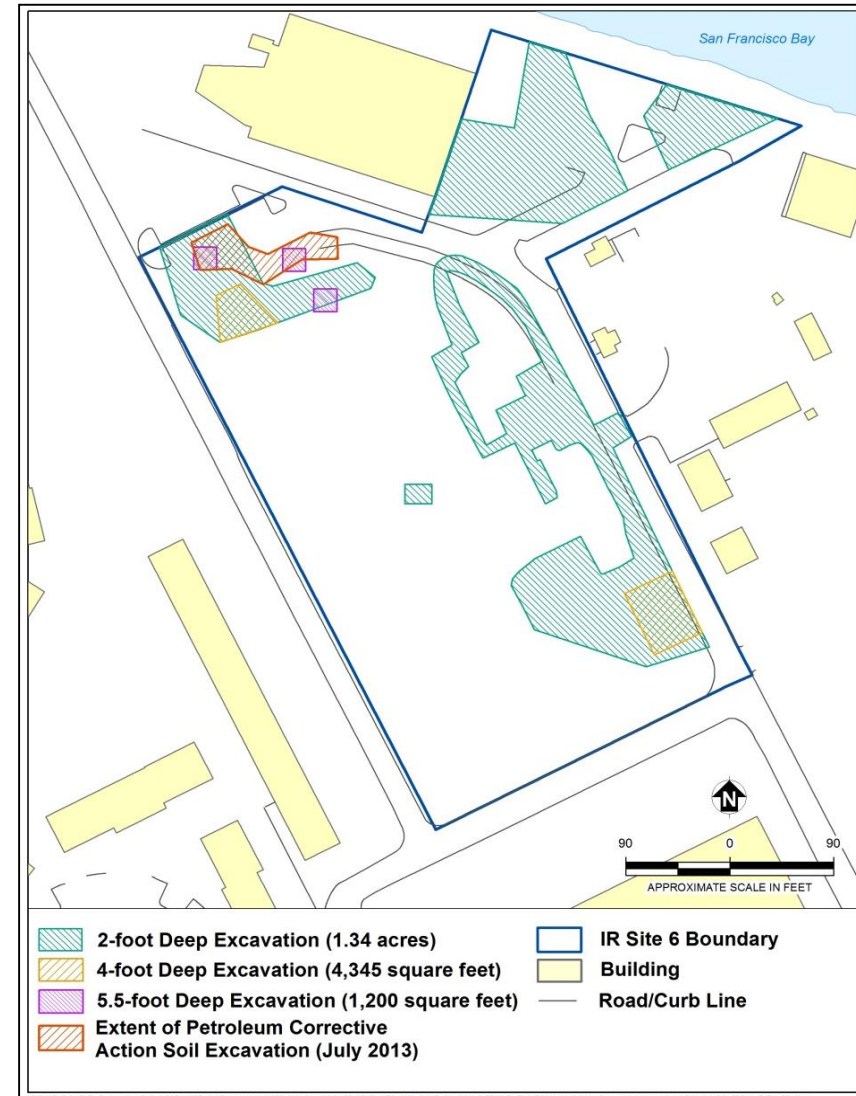
- Additional excavation at three (3) locations from 2 to 6 feet bgs

MARCH 2016

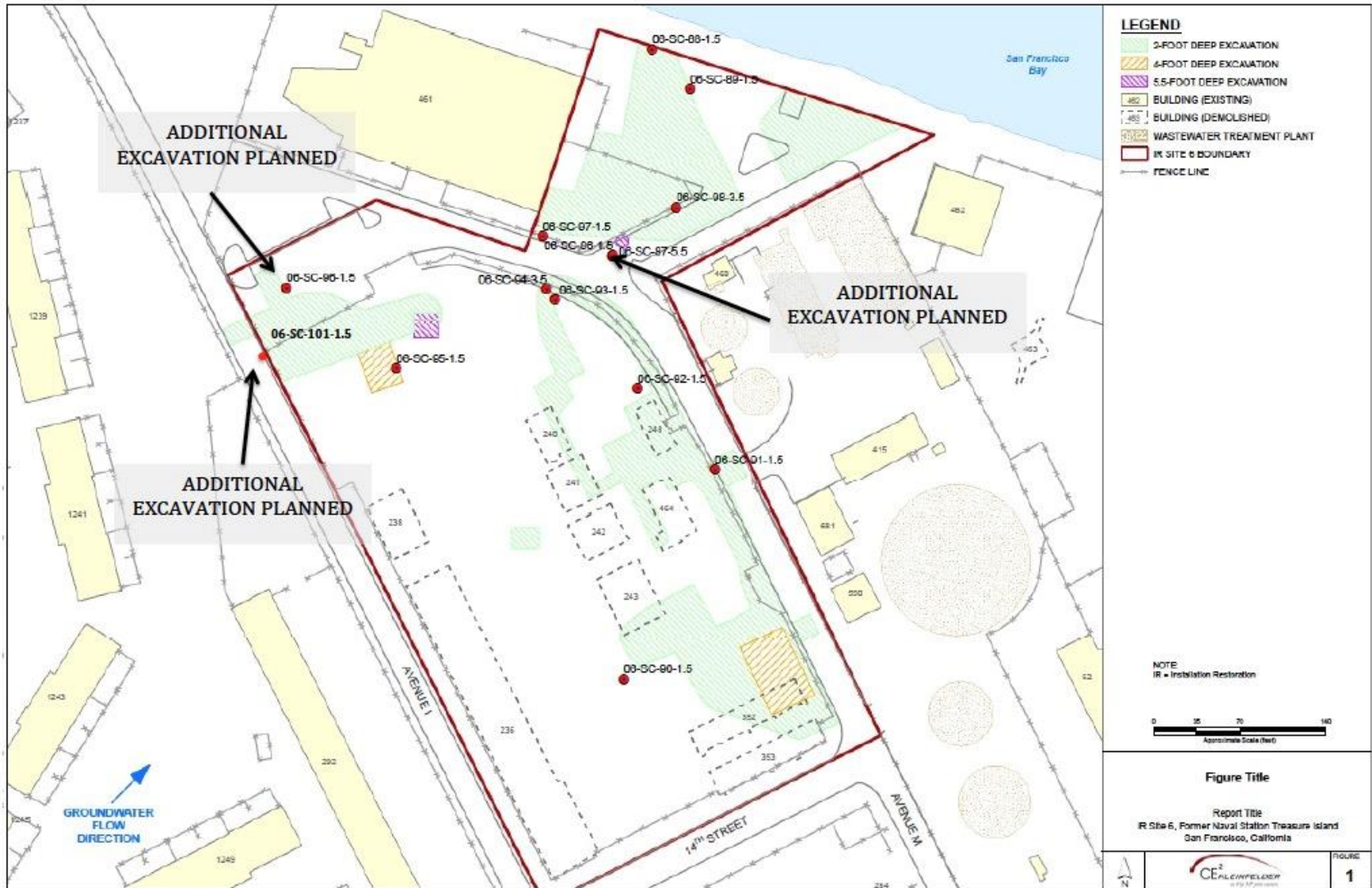
- Remedial Action Completion Report

SEPTEMBER 2016 – JUNE 2017

- Monitor nine (9) wells for four quarters: 3Q16, 4Q16, 1Q17, & 2Q17)



Site 6 Field Activities – Planned Contingency Excavations



Site 6 Field Activities



Field Work Update

- Disposal Area: Westside
- Disposal Area: North Point
- Disposal Area: Bayside
- Waste Disposal
- Schedule

Disposal Area Westside



Current Activities: Demobilization of equipment & waste disposal

- No excavation planned for remainder of 2016
- Additional work to occur in 2017

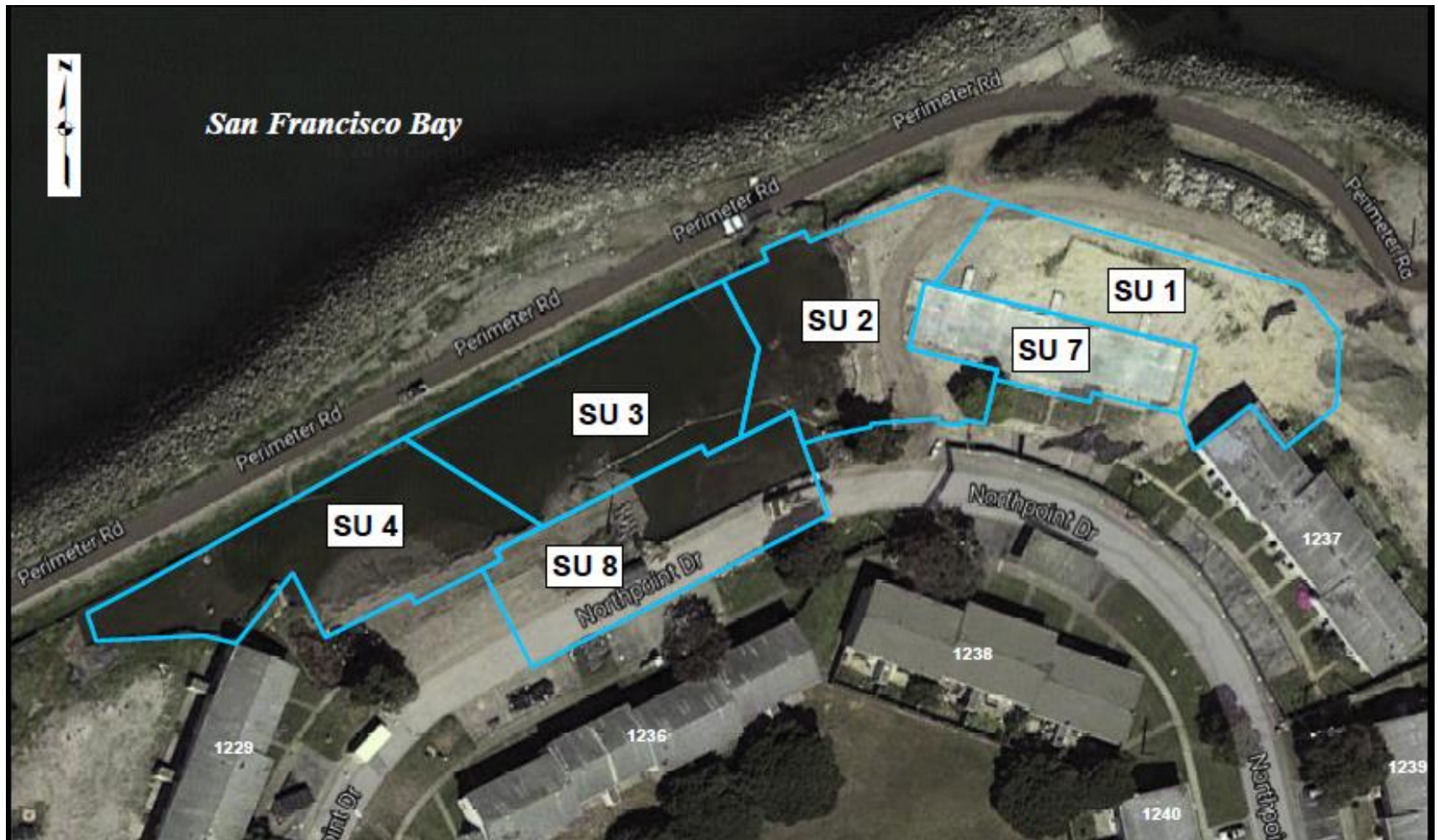
60-foot by 60-foot shoring system installed



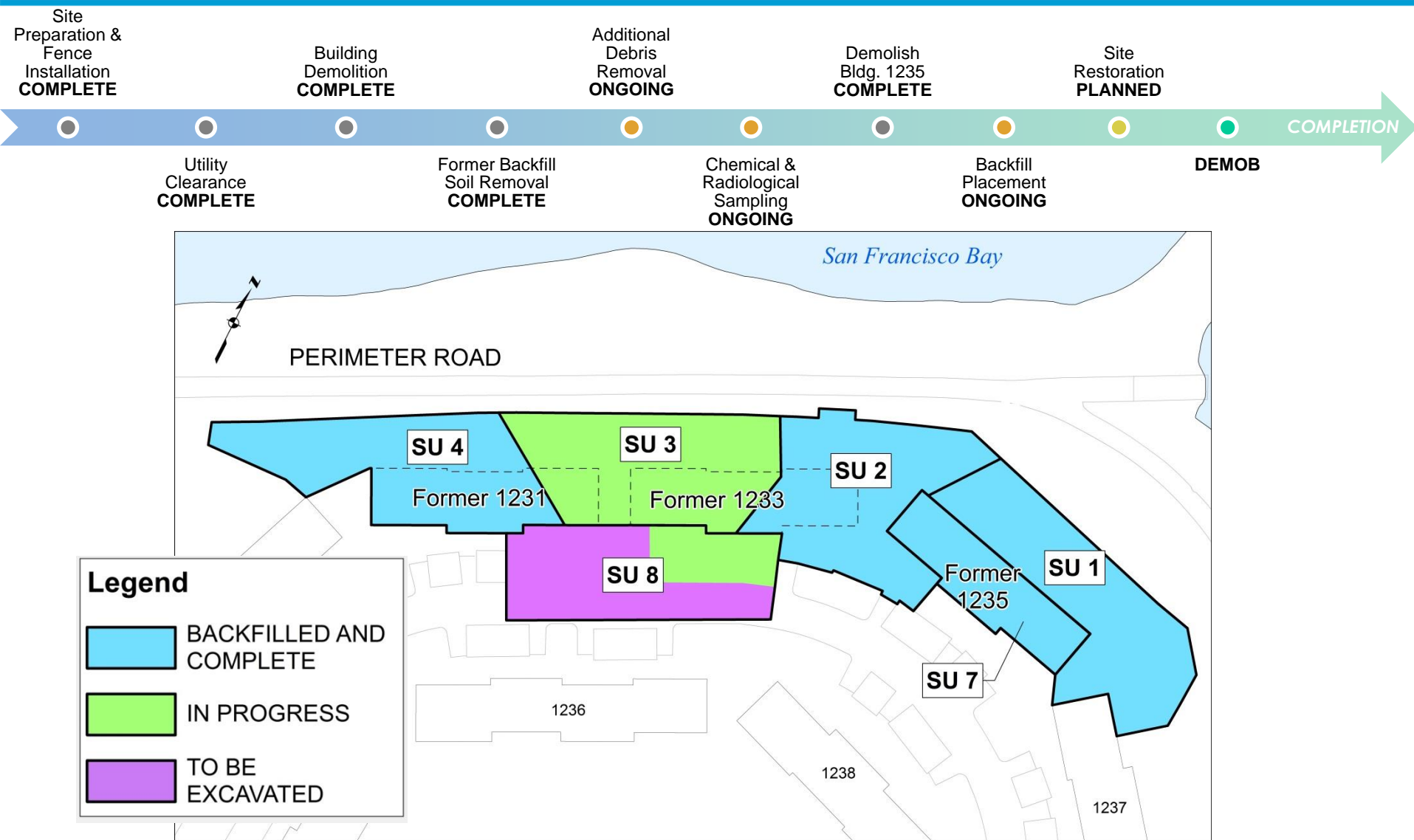
After shoring system removal and backfill



Disposal Area North Point



Disposal Area North Point



Disposal Area North Point



6,496 cy excavated (5,889 cy originally planned)

Remaining Work:

- Remove additional debris beneath North Point Road
- Complete radiological surveys of excavation and soil removed
- Collect chemical confirmation samples
- Backfill
- Re-seed grassy areas and re-pave road

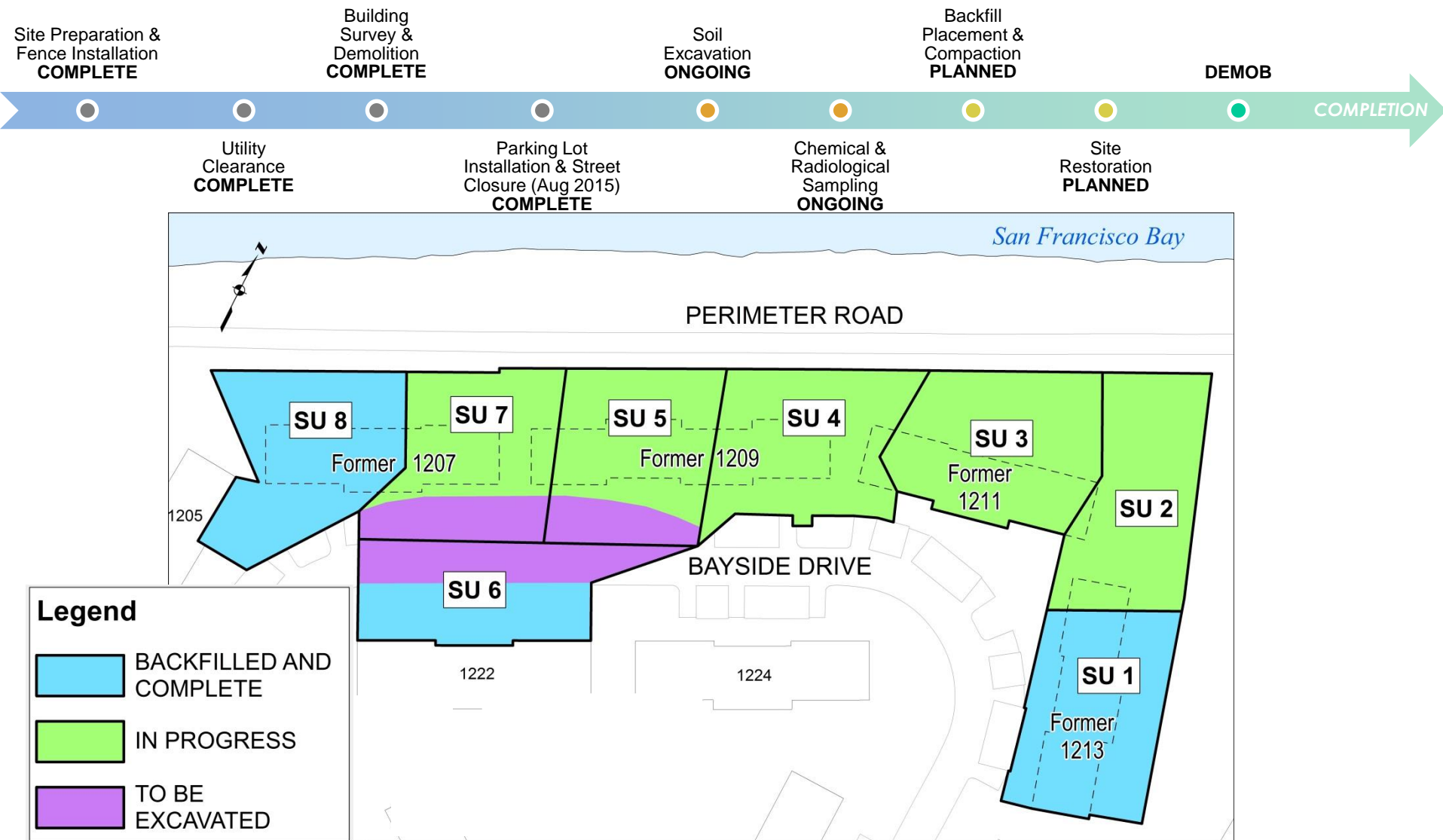


Large excavator removing the final layer of soil in SU-3

Disposal Area Bayside



Project Status: Disposal Area Bayside



Project Status: Disposal Area Bayside



5,680 cy excavated (5,233 cy originally planned)

Upcoming Work:

- Relocate gas line and water lines
- Continue debris removal beneath Bayside Drive
- Radiological survey of excavation boundaries and soil removed
- Collect chemical confirmation samples
- Backfill
- Re-seed grassy areas and re-pave road



Removal of final layer of debris free soil at Bayside SU-2

Project Status: Disposal Area Bayside



Metal drums and other industrial debris removed from Bayside SU-2. Excavation extended to approximately 12 feet in some areas (Sep 15, 2016)



Close-up of crushed drums as they are being removed from Bayside (Sep 15, 2016).

Low-level Radiological Waste (LLRW)



- LLRW bins are loaded with waste that does not meet the stringent soil release criteria
- 106 roll-off bins (~1,500 cubic yards) filled with LLRW
- Recent Radiological objects:
 - April: 87
 - May: 82
 - June: 1
 - August: 6
 - September: 26
 - October: 7
- Total Radiological Objects since 2014 (466 total):
 - Westside: 243 objects
 - Bayside: 160 objects
 - North Point: 63 objects



LLRW roll-off bin being offloaded by a bin truck at Westside

Waste Disposal: Loading and Haul-Out

- ~13,400 tons of waste soil and debris have been loaded and hauled off site
- 598 trucks
- Waste was disposed offsite at a facility in Buttonwillow, California
- Rad Waste goes to a facility in Clive, Utah or Grandview, Idaho



Loading of waste at Site 32

Waste Disposal: Loading and Haul-Out



Tarping the truck load and brushing off tires prior to truck leaving the site.



Approximately 20-40 trucks per day were loaded. All truck passed through the portal monitor before leaving the site.

Activity Schedule: Monthly Look Ahead

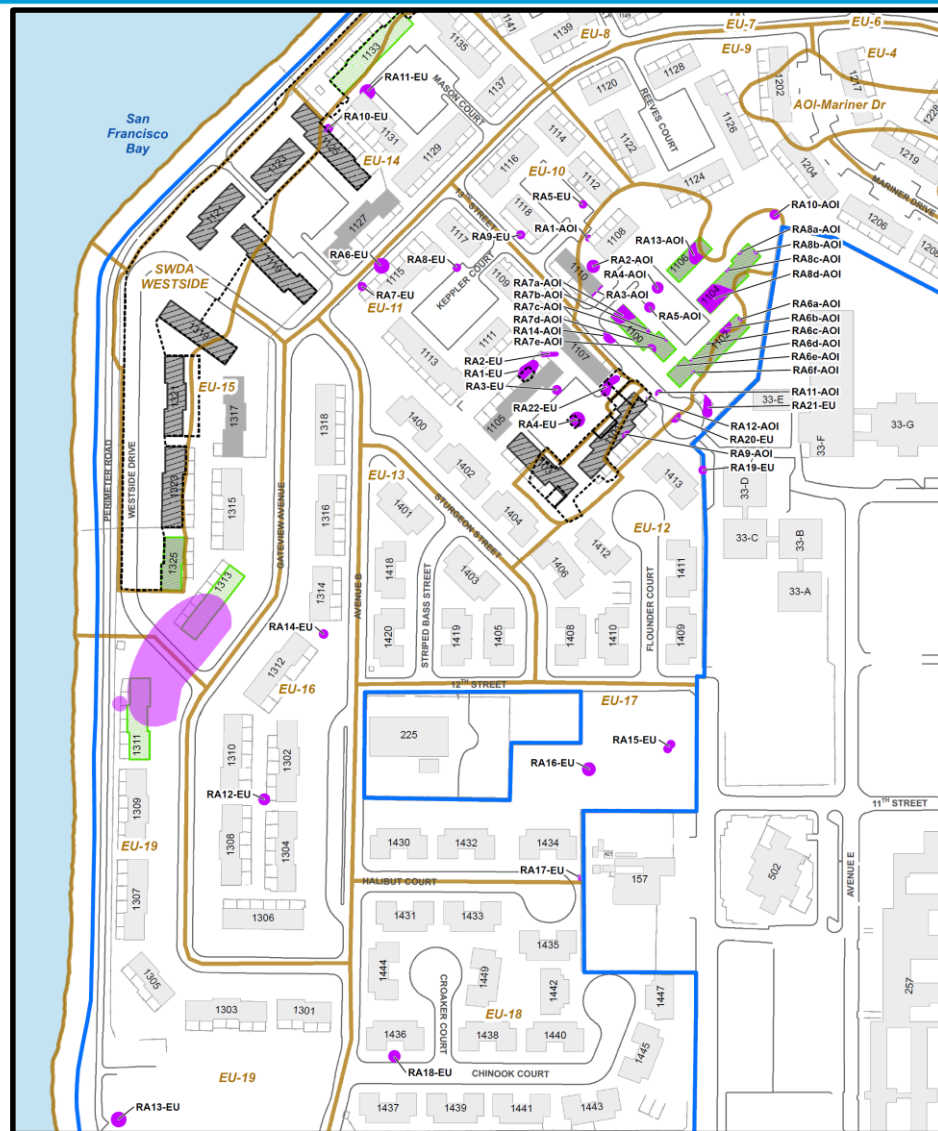


	October	November	December	January 2017
<u>North Point</u>				
Excavation: Debris/Impacted Soil				
RSY Pad Operations				
Backfill				
<u>Bayside</u>				
Excavation: Buffer/Clean Backfill				
Excavation: Impacted Soil				
RSY Pad Operations				
Backfill				
<u>Westside</u>				
Foundation removal (1319)				
Foundation scanning/removal (1323)				
RSY Pad Operations				
<u>Site 32/Bigelow Crt</u>				
RSY Pad Processing			T&D	T&D
<u>Air Monitoring</u>				

Site 12 Chemical Cleanup Areas



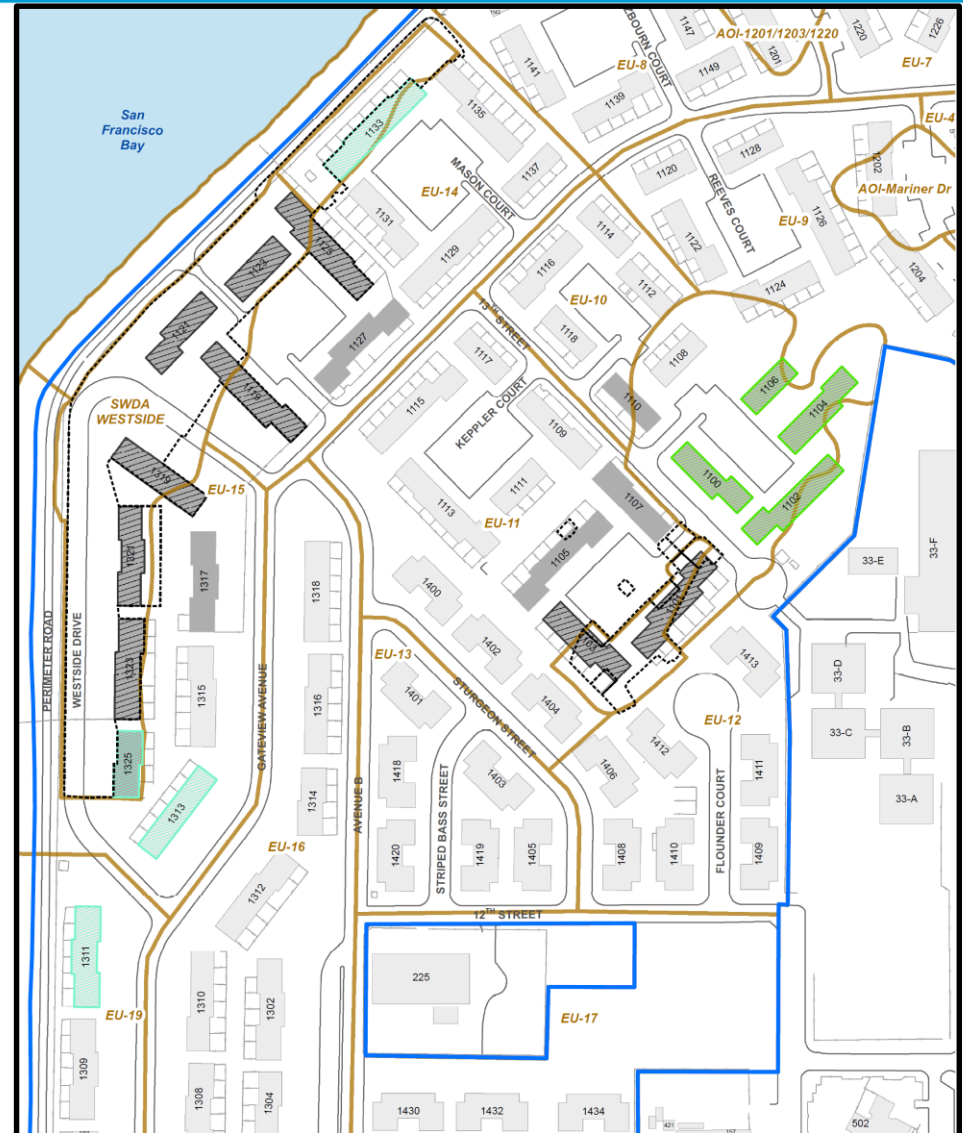
- All planned excavations in southern Site 12 shown in Purple color
 - Not including Solid Waste Disposal Area Westside
 - Chemical of concern different per locations
 - Includes Gateview Arsenic/TPH Area excavation
 - Building demolition required



Site 12 Building Demolition



- Demolishing 8 buildings as part of this project
 - Green colored buildings already demolished
 - Mint colored buildings to be demolished by end of October 2016



Site 12 Chemical Cleanup Areas

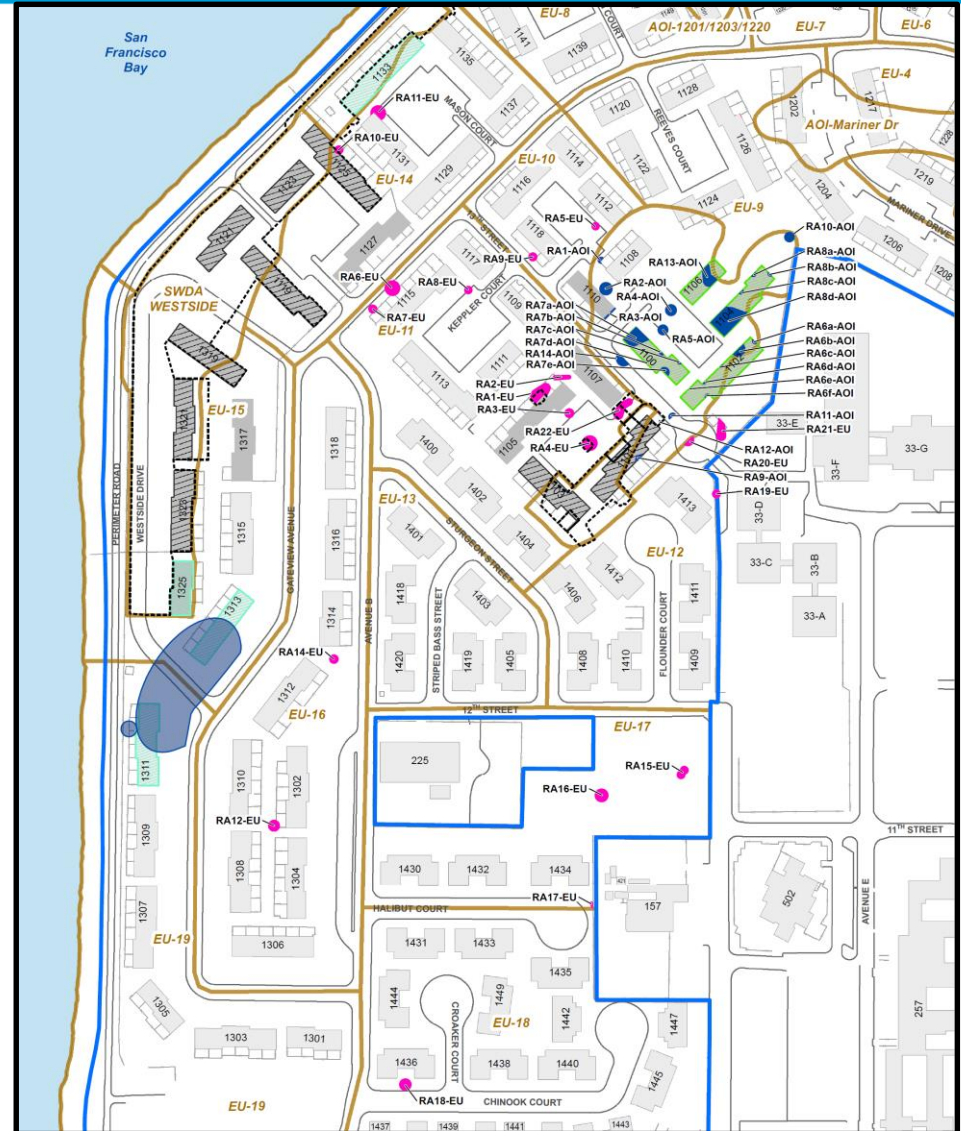
- **Work completed**

- Excavations colored Pink

- **Work to be completed**

- Excavation at Halyburton/Bigelow Court
- Excavation at Gateview Arsenic in Groundwater Area

All field work complete by January 20, 2017



Site 12 Chemical Cleanup Areas



Excavation location “RA16-EU”

- **Target Chemical:** Benzo(a)pyrene
- **Two steel underground storage tanks and piping encountered**
- **Completed planned excavation for Benzo(a)pyrene**
- **Future removal / investigation**
 - Likely associated with former Bldg 224



Site 12 Photos of Field Activities



October 6, 2016 (Halyburton building demo'd)



October 5, 2016 (Spreading soil on RSY pad)

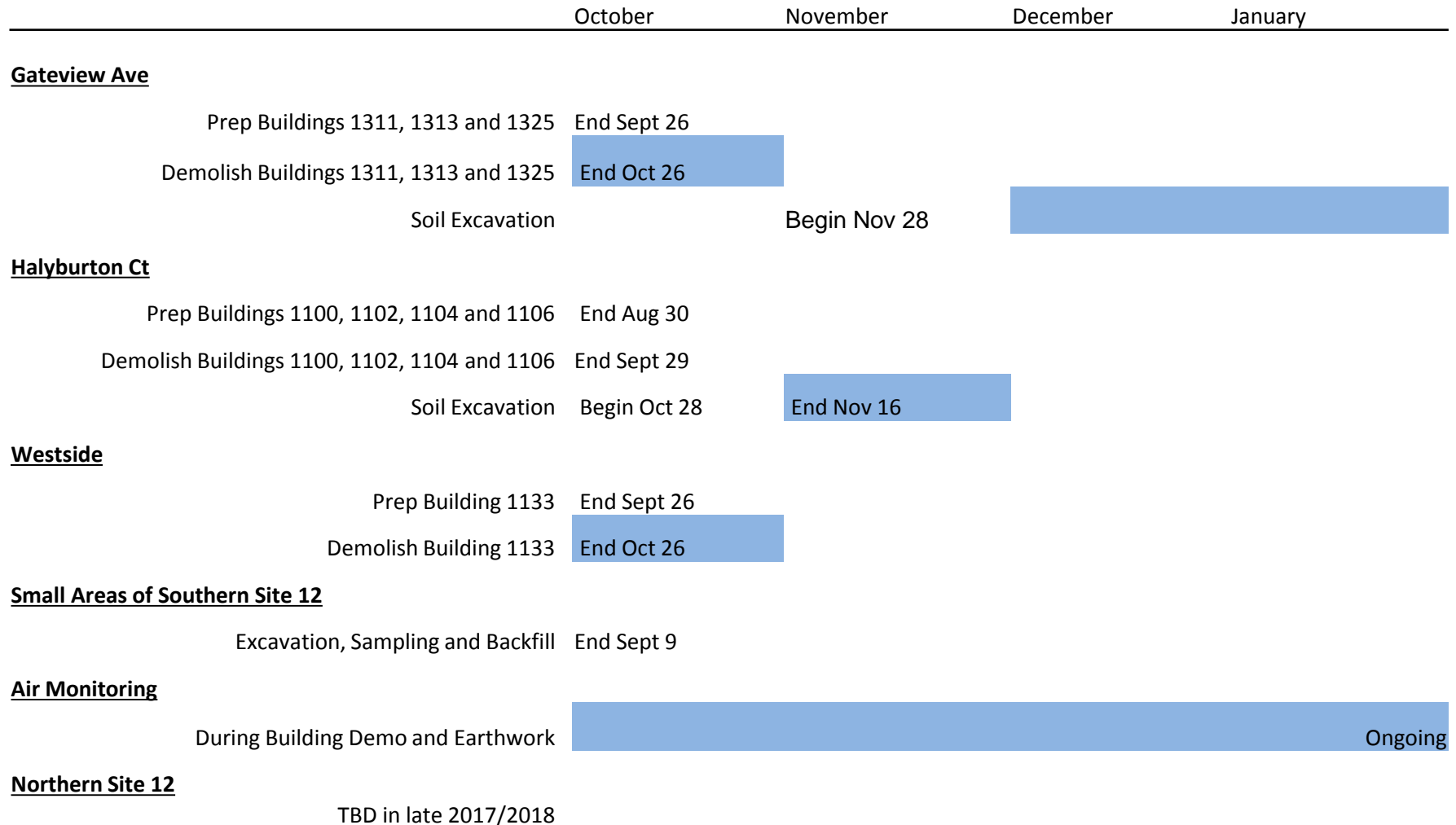


September 26, 2016 (work notice distribution)



October 6, 2016 (concrete slab scanning)

Site 12 Schedule: 4-Month Look Ahead



Site 24 Site Description and History



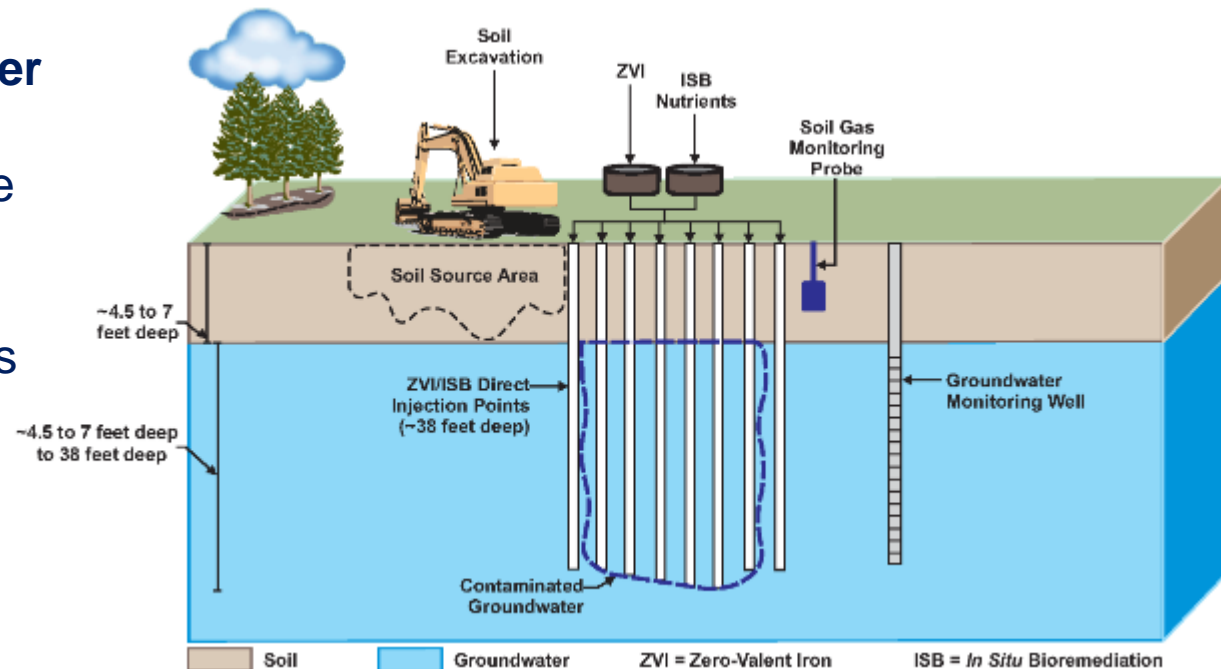
- Approximately 20 acres
- Contains Building 99, the former dry cleaning facility
 - Chlorinated solvents were used
 - Soil and groundwater contamination
- Majority of Site 24 is planned for open space (green)



Remedial Action based on 2015 Record of Decision



- Approved by the Regulators
- **Soil / Groundwater Remedy selected:**
 - **Excavate and remove soil at and near Building 99** that is contaminating groundwater or producing soil gas
 - **Groundwater treatment** to breakdown contaminants to non-toxic by-products
 - **Monitor groundwater and soil gas** (for 2 years of performance monitoring plus 1 additional year to ensure cleanup goals continue to be met)



Pre-Design Site Characterization

- Collected soil and groundwater samples
- Identified excavation area and groundwater treatment extent

Remedial Action

- Excavate, remove, and dispose soil from two areas
- Groundwater treatment in three areas (injections)

Monitoring

- Completed baseline groundwater and soil gas monitoring
- Quarterly performance monitoring (2 years)
- Continue monitoring until cleanup goals are met
- At least 1 additional year to ensure cleanup goals continue to be met, according to California regulations

Pre-Design Site Characterization – Soil Sampling



Why?

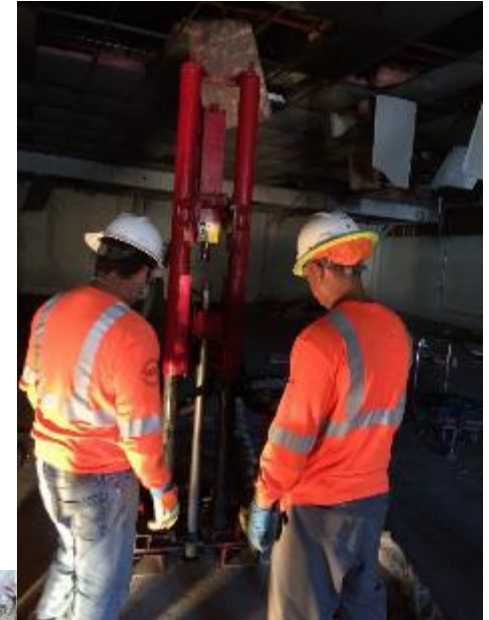
- Define excavation areas and depths

How?

- Collected soil samples using a small direct push drill rig

Where?

- 17 primary locations near highest concentrations of contaminants in soil, groundwater, and soil gas
- Continued step-out sampling until samples were clean
- 39 total locations
- 2 samples at each location



Soil Excavation Process



What?

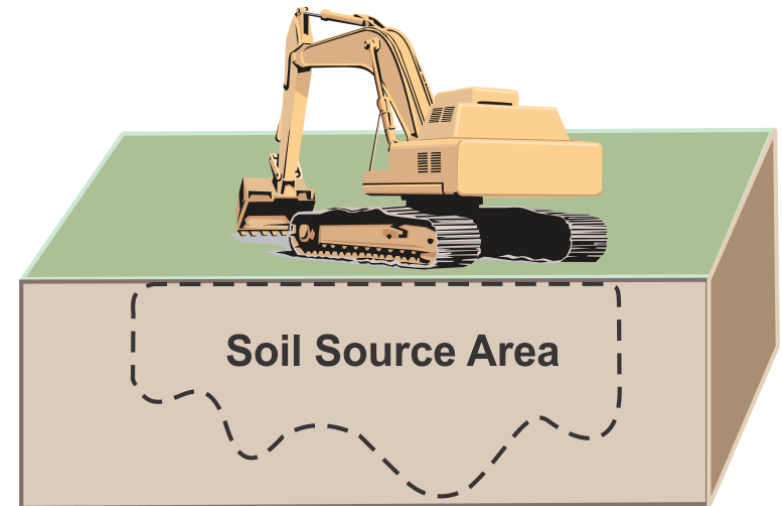
- Remove contaminated soil

Where?

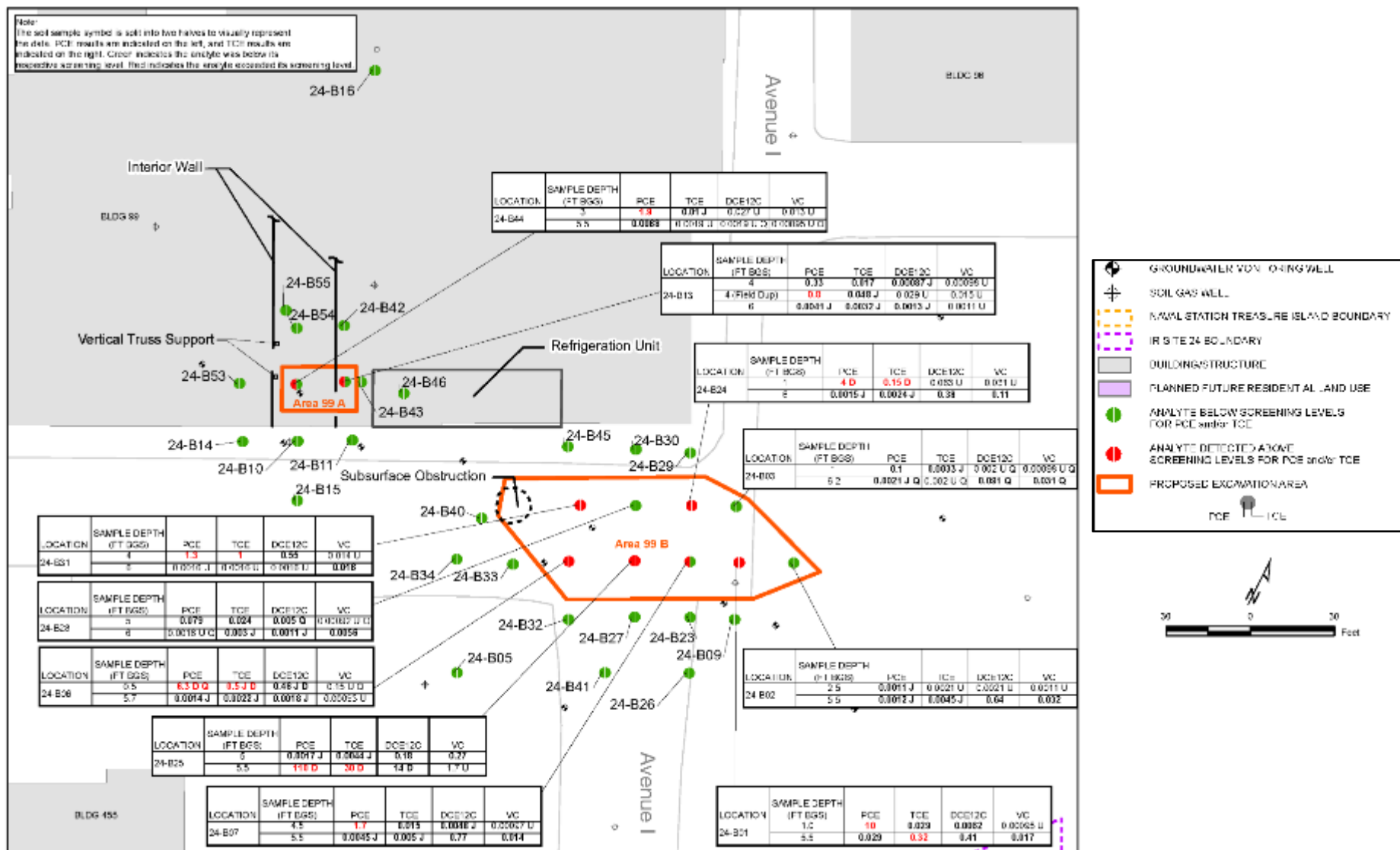
- One area inside Building 99 and one area outside of Building 99

How?

- Excavate ~1,100 cubic yards of soil
- Collect confirmation samples
- Send soil off-site for disposal
- Backfill with clean soil



Soil Results and Excavation Areas



Excavation Areas



Area 99A inside Building 99



Area 99B outside Building 99

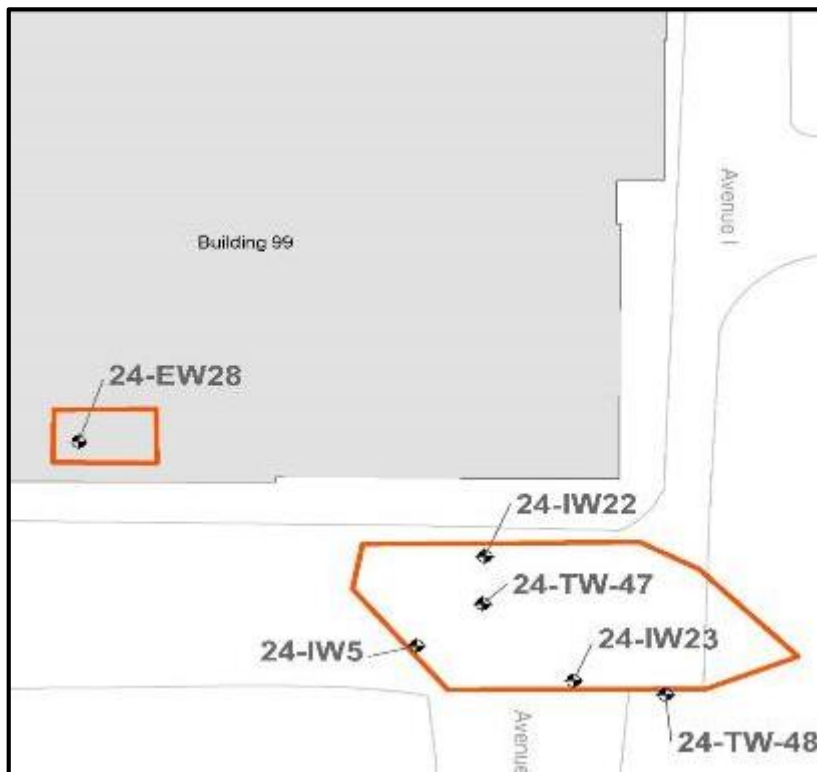
Well Destruction

Why?

- Six monitoring wells located within excavation area

How?

- Over drilling using hollow stem auger



Pre-Design Site Characterization – Groundwater Sampling



Why?

- Define groundwater treatment areas and depths

How?

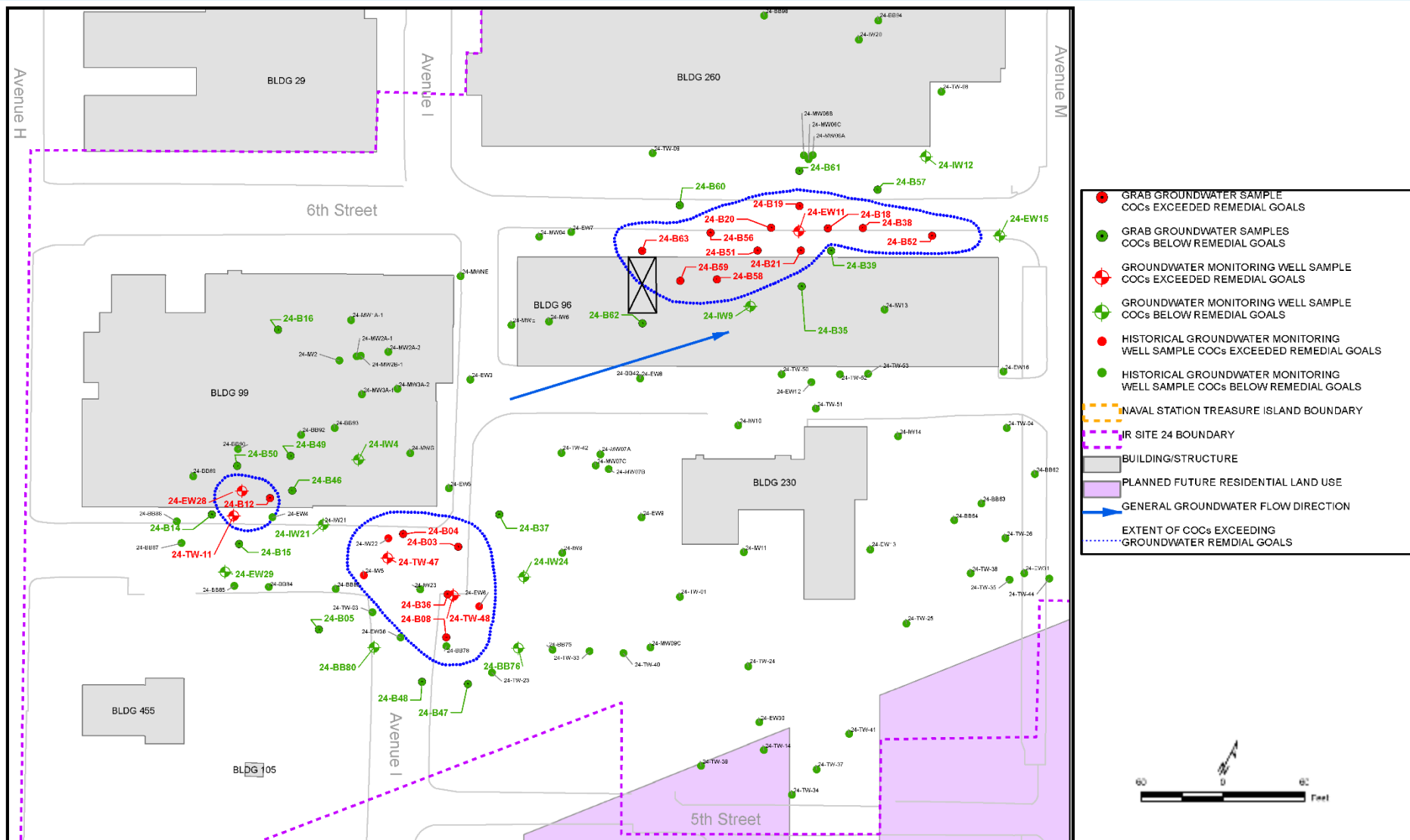
- Collected groundwater samples using a small direct push drill rig

Where?

- 12 primary locations near the three groundwater plumes
- Continued step-out sampling until samples were clean
- 32 total locations
- 1 to 4 samples at each location



Groundwater Results

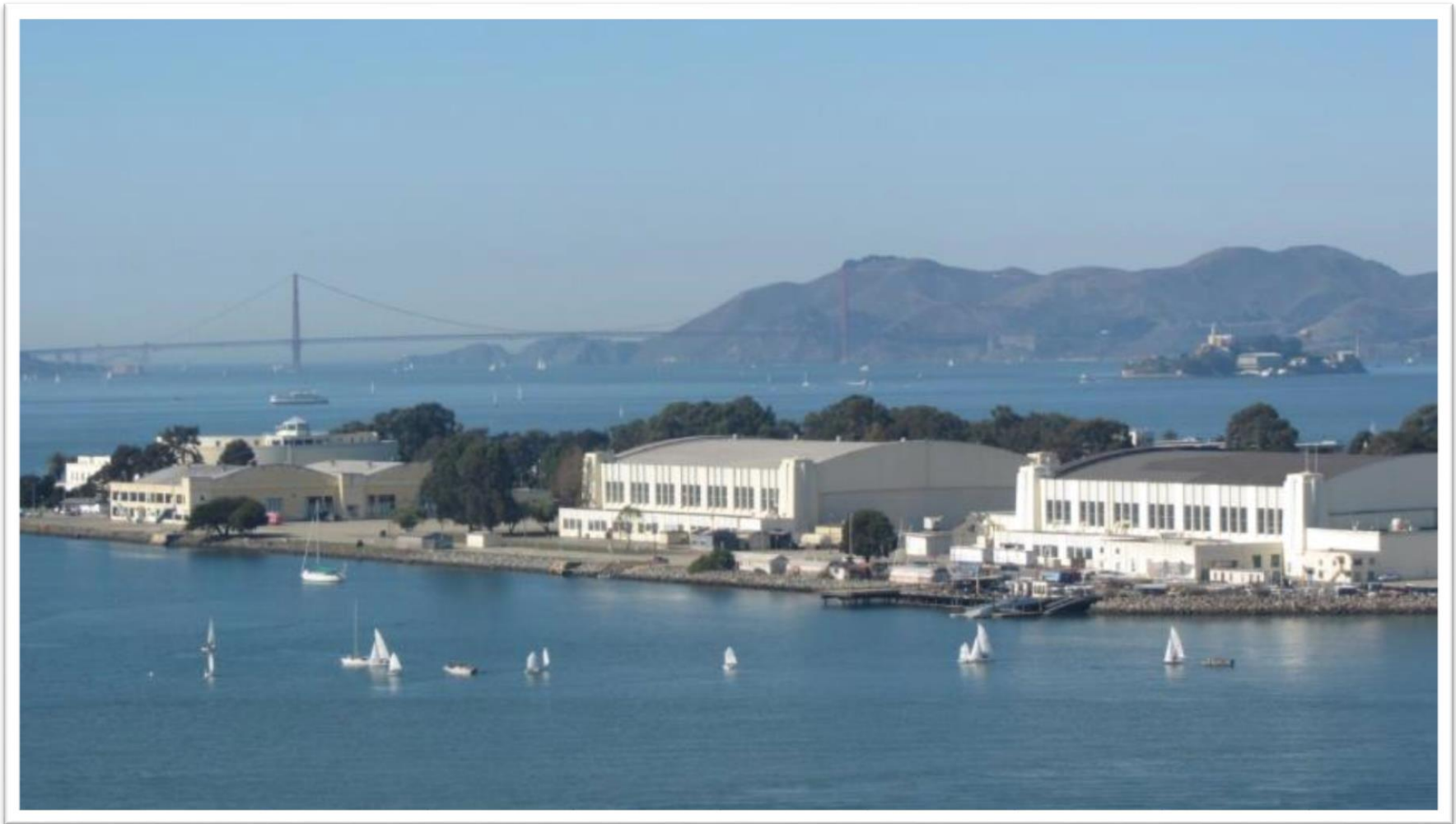


Fieldwork Schedule



Date	Activity
October to November 2016	Excavation <ul style="list-style-type: none">• Digging• Transporting Soil Off-Site• Confirmation Sampling• Backfilling
December 2016	Groundwater Treatment
March 2017	Quarterly Groundwater and Soil Gas Monitoring Begins

Questions?



**Naval Station Treasure Island
Environmental Cleanup Program
Document Tracking Sheet
October 2016 – March 2017**

			DRAFT							RTC				FINAL				
Item	Document Title & Information	CTO/DO	Draft to Agencies		Agency Comments						Preliminary RTCs to Agencies		Resolve and Concur on RTCs		Final to Agencies		Comments	
					Date Due	DTSC	WATER BOARD	TIDA/TICD	RAB	OTHER								
Radiological Reports																		
	FSS Report for Building 233 Catch Basins RPM: Kimberly Noble PM: Lisa Bercik, CB&I	0012	06/15/16	✓	07/22/16	✓	X	✓			08/05/16	✓	08/12/16	✓	09/06/16	✓	CDPH RURR Letter received 9/21/16	
1	FSS Report for Site 30/30N/30S RPM: Louie Cardinale PM: Lisa Bercik, CB&I	0012	09/28/16	✓	10/28/16						11/11/16		11/18/16		11/27/16		CDPH RURR Letter needed for closure	
2	FSS Report for Site 31 RPM: Louie Cardinale PM: Lora Battaglia, CB&I	0014	10/26/16		11/27/16						12/09/16		12/21/16		12/27/16		CDPH RURR Letter needed for closure	
	FSS Report for Site 6 RPM: Louie Cardinale PM: Shanti Montgomery, TtEC	0025	02/22/16	✓	04/15/16	✓	X	✓	✓		05/20/16	✓	07/22/16	✓	09/20/16	✓	CDPH RURR Letter requested by 11/01/16	
3	FSS Report for Site 24 (Building 342, Lot 69) RPM: Kimberly Noble PM: Lisa Bercik, CB&I	0012	11/04/16		12/02/16						12/16/16		12/23/16		12/30/16		CDPH RURR Letter needed for closure	
4	FSS Report for Site 32A RPM: Kimberly Noble PM: John Baur, Gilbane	0006	11/07/16		12/06/16						12/27/16		01/17/17		02/05/17		CDPH RURR Letter needed for closure	
5	FSS Report for Northeast Corner RPM: Kimberly Noble PM: Lisa Bercik, CB&I	0012	11/18/16		12/16/16						12/30/16		01/06/17		01/13/17		CDPH RURR Letter needed for closure	
6	FSS Report for Site 20 RPM: Kimberly Noble PM: Lisa Bercik, CB&I	0012	11/11/16		12/09/16						12/23/16		12/30/16		01/06/17		CDPH RURR Letter needed for closure	
7	FSS Report for Site 32B RPM: TBD PM: TBD	TBD	TBD		TBD						TBD		TBD		TBD			
Site 6																		
8	RACR RPM: Kimberly Noble PM: Ted Tyler, CE2 Kleinfelder	0003	12/01/16		01/02/17						01/16/17		01/30/17		02/22/17			
Site 12																		
9	ROD/RAP (non-SWDA, non-Radiological) RPM: Kimberly Noble PM: Karen Miller, Helios	3208	08/01/16	✓	09/16/16	✓	✓	✓			10/31/16		11/14/16		12/02/16			
10	FS Addendum (SWDA/Radiological) RPM: Louie Cardinale PM: TBD	:	02/15/17		03/17/17						04/14/17		05/12/17		06/08/17			
Site 24																		
11	Soil Gas Data Gaps Summary Report RPM: Mukesh Mehta PM: Patrick Hamner, Trevet	0030	10/17/16	✓	12/01/16						12/08/16		12/22/16		12/29/16			
Site YF3																		
12	Intertidal Area Data Gaps Investigation WP RPM: Mukesh Mehta PM: Andrew Bullard, Battelle	0103	09/01/16	✓	10/17/16	X		✓	✓		10/31/16		11/14/16		11/24/16			

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Item	Document Title & Information	C/O/DO	Draft to Agencies	Agency Comments						Preliminary RTCs to Agencies	Resolve and Concur on RTCs	Final to Agencies				
				Date Due	DTSC	WATER BOARD	TIDA/TICD	RAB	OTHER							
Other Reports																
	Finding of Suitability to Transfer (FOST) 5	:	03/11/16	✓	04/11/16	✓	✓	✓			05/09/16	✓	05/16/16	✓	08/25/16	✓
	RPM: John Hill															
13	Finding of Suitability to Transfer (FOST) 6	:	10/25/16		11/23/16						12/07/16		12/16/16		12/23/16	
	RPM: John Hill															
14	2015 Basewide GW Monitoring Report	0004	06/30/16	✓	07/29/16	✓	X	✓			10/21/16		11/16/16		12/05/16	
	RPM: Louie Cardinale															
	PM: Patrick Hamner, Trevet															
15	2016 Site Management Plan	0058	08/22/16	✓	09/16/16	✓	X	✓			10/19/16		11/02/16		11/09/16	
	RPM: Kimberly Noble															
	PM: Jessica O'Sullivan, TriEco-Tt															
16	Basewide Well Destruction WP Addendum	0013	09/27/16	✓	11/10/16						11/13/16		11/18/16		11/22/16	
	RPM: Mukesh Mehta															
	PM: Art Gunter, TtEC															

✓ Production or review of document is complete. Abbreviations:

X Received notification of no comments or comments deferred to other agency.

Grey shading indicates the document is finalized.

Blue shading indicates agency review comments are due within the next 60 days or are outstanding.

Yellow shading indicates documents that will be issued draft or final within the next 60 days.

CTO/DO = Contract task order/delivery order
DTSC = Department of Toxic Substances Control
EPA = U.S. Environmental Protection Agency
FS = Feasibility study
FSS = Final status survey
LUC = Land use control
NA = Not applicable
NTCRA = Non-time critical removal action
PCSR = Post-construction summary report
PM = Project manager
PP = Proposed plan
RACR = Remedial action completion report
RAP = Remedial action plan
RAWP = Remedial action work plan

RD = Remedial design
ROD = Record of decision
RPM = Remedial project manager
RTC = Response to comments
SAP = Sampling and analysis plan
SWDA = Solid waste disposal area
TBD = To be determined
TCRA = Time-critical removal action
TICD = Treasure Island Community Developers
TIDA = Treasure Island Development Authority
TPH = Total petroleum hydrocarbons
TSP = Task specific plan
Water Board = Regional Water Quality Control Board
WP = Work plan

**Naval Station Treasure Island
Navy Field Schedule
October 2016 – March 2017**

Item	Activity and Investigation Area	Field Dates	Navy RPM (Contractor)	Complete
Site 6				
1	Remedial Action	Start: 05/02/16 Finish: 10/21/16	Kimberly Noble (CE2 Kleinfelder)	
Site 12				
2	Phase III Non-Time Critical Removal Action	Start: 05/12/15 Finish: 12/21/16	Chris Yantos (CB&I)	
3	Time Critical Removal Action (Gateview, Discrete Areas, Halyburton)	Start: 07/25/16 Finish: 03/31/17	Chris Yantos (CE2 Kleinfelder)	
Site 24				
4	Remedial Action	Start: 08/04/16 Finish: 12/21/16	Mukesh Mehta (Parsons)	
Site 31				
	Soil Sampling and Surveys - Additional Field Work	Start: 05/09/16 Finish: 08/19/16	Louie Cardinale (CB&I)	✓
Site YF3				
5	Intertidal Data Gaps Sampling (Trident Probe Survey and Pore Water Collection)	Start: 12/09/16 Finish: 12/15/16	Mukesh Mehta (SPAWARSYCEN Pacific)	
6	Intertidal Data Gaps Sampling (Onshore and Offshore Sediment Sampling)	Start: 01/09/17 Finish: 01/14/17	Mukesh Mehta (Battelle Team)	
Other				
7	Basewide Well Decommissioning	Start: 11/29/16 Finish: 01/20/17	Mukesh Mehta (TtEC)	

Abbreviations:

- ✓ Field work is complete
- RPM Remedial project manager
- TBD To be determined

Yellow shading indicates field activities that will start or finish within the next 60 days.

Grey shading indicates field activities are complete.